

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1           1.       (Original) A gas injection apparatus, comprising:  
2           a tubular member defining an axial bore therethrough, the axial bore adapted to deliver a  
3 gas into a wellbore proximate a perforation interval via an orifice; and  
4           a gas lift valve attached to the tubular member, the gas lift valve adapted to regulate  
5 communication between the axial bore of the tubular member and the wellbore via the orifice.
  
- 1           2.       (Currently Amended) The gas injection apparatus of claim 1, further comprising  
2 a sealing mechanism to seal the wellbore above the perforation interval,  
3           wherein the tubular member is adapted to engage ~~[[a]] the sealing mechanism, the sealing~~  
4 ~~mechanism adapted to seal the wellbore above the perforation interval.~~
  
- 1           3.       (Currently Amended) The gas injection apparatus of claim ~~[[1]]~~ 2, wherein the  
2 sealing mechanism is a dual-port packer.
  
- 1           4.       (Original) The gas injection apparatus of claim 1, wherein the tubular member is  
2 adapted to inject a gas proximate the perforation interval of a gas-bearing well.
  
- 1           5.       (Original) The gas injection apparatus of claim 1, wherein the tubular member is  
2 adapted to inject a gas proximate the perforation interval of an oil-bearing well.
  
- 1           6.       (Original) The gas injection apparatus of claim 1, further comprising a retrieving  
2 element attached to the tubular member.

1           7.       (Currently Amended) A gas lift system for use in producing a well having a  
2 perforation interval, the system comprising:  
3           a sealing mechanism adapted to seal the well at a location above the perforation interval,  
4 the sealing mechanism having two ports therein;  
5           a tubular string adapted to produce ~~the well~~ fluid from the perforation interval via one  
6 port in the sealing mechanism; and  
7           an injection tool adapted to ~~deliver~~ inject gas into the well proximate the perforation  
8 interval via the other port in the sealing mechanism, the injection tool having ~~one or more~~ plural  
9 gas lift valves for ~~injecting a~~ delivering the injected gas into the well ~~[[below]]~~ at a location  
10 ~~[[above]]~~ below the sealing mechanism.

1           8.       (Original) The gas lift system of claim 7, wherein the tubular string comprises  
2 one or more gas lift valves for injecting a gas into the well at a location above the sealing  
3 mechanism.

1           9.       (Original) The gas lift system of claim 7, wherein the sealing mechanism is a  
2 dual-port packer.

1           10.      (Original) The gas lift system of claim 7, wherein the well is a gas-bearing well.

1           11.      (Original) The gas lift system of claim 7, wherein the well is an oil-bearing well.

1           12.      (Original) A method for producing a well having a perforation interval proximate  
2 a formation, comprising:  
3           injecting gas into the well proximate the perforation interval.

1           13.     (Currently Amended) A method for unloading an accumulated liquid from a well  
2     having a perforation interval proximate a gas-bearing formation, wherein hydrostatic pressure of  
3     the accumulated liquid exceeds pressure of produced gas, the method comprising:

4                 sealing the formation in the well at a location above the perforation interval;

5                 providing a tubing string for establishing communication between surface and a point  
6     below the sealing location;

7                 providing a gas injection tool having a gas lift valve for establishing communication  
8     between a point above the sealing location and the perforation interval below the sealing  
9     location;

10                delivering gas into the well proximate the perforation interval via the gas injection tool to  
11     decrease the ~~hydrostatic pressure~~ hydrostatic pressure of the accumulated liquid to a level  
12     sufficient to permit gas to be produced from the formation; and

13                removing the accumulated liquid and gas from the well via the tubing string.

1           14.     (Currently Amended) A gas lift system for use in producing a well having  
2     perforations proximate a gas-bearing formation, the system comprising:

3                 a dual-port packer adapted to seal the well at a location above the perforations, the  
4     sealing mechanism having two ports therein;

5                 a tubing string adapted to deliver gas from the perforations proximate the formation via  
6     one port in the packer to a surface location, wherein the tubing string has a valve that is actuated  
7     in response to gas pressure in a well annulus outside the tubing string exceeding a predetermined  
8     level; and

9                 an injection tool adapted to ~~deliver~~ inject gas from a surface location into the well  
10     proximate the perforations via the other port in the packer, the injection tool having a gas lift  
11     valve for ~~injecting~~ delivering the injected gas into the well ~~[[below]]~~ at a location ~~[[above]]~~  
12     below the sealing mechanism.

1           15.     (New) The gas injection apparatus of claim 1, wherein the gas lift valve is  
2     arranged on a side of the tubular member to enable injected gas to pass in a radial direction of the  
3     tubular member into the wellbore through the orifice.

1           16.     (New) The gas injection apparatus of claim 1, further comprising at least another  
2 gas lift valve attached to the tubular member to regulate communication between the axial bore  
3 of the tubular member and the wellbore through another orifice of the tubular member,  
4           wherein the gas lift valves are actuated in response to different gas pressures.

1           17.     (New) The gas injection apparatus of claim 16, wherein a first of the gas lift  
2 valves is first actuated in response to the delivered gas reaching a first pressure, and wherein a  
3 second of the gas lift valves is subsequently actuated in response to the delivered gas reaching a  
4 second, different pressure.

1           18.     (New) The gas injection apparatus of claim 17, wherein the first gas lift valve is  
2 closed once the delivered gas reaches the second pressure.

1           19.     (New) The gas lift system of claim 7, wherein the plural gas lift valves are  
2 actuatable at different pressures.

1           20.     (New) The gas lift system of claim 19, wherein the plural gas lift valves are  
2 configured to sequentially actuate in response to the injected gas reaching different pressures.

1           21.     (New) The method of claim 12, wherein injecting the gas comprises injecting the  
2 gas using an injecting tool having plural gas lift valves that actuate at different gas pressures.

1           22.     (New) The method of claim 21, further comprising:  
2           actuating a first one of the gas lift valves when the injected gas reaches a first pressure;  
3           and  
4           actuating a second one of the gas lift valves when the injected gas reaches a second,  
5           greater pressure.

- 1           23.   (New) The method of claim 22, further comprising closing the first gas lift valve
- 2   when the injected gas reaches the second pressure.